Environment economics course content in economics and management study programs

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ENVIRONMENT ECONOMICS COURSE

Environment economics and natural resource economics is provided for bachelor degree program students but only for three specialization of 8. In master degree program students environment economics is included as some topics of other courses.

Environment Economics Content

Principles of environmental Economics 2nd edition, A. M. Hussen,London and New York, Routledge, 2004

Environment economics course could be divided in two parts:

1. Natural resources as basis for economic growth. Development and natural resource scarcity. Basic elements of renewable and nonrenewable resources.
2. Economy's produced wastes. Theory of pollution control, and environmental regulations.

Environment Economics Content

Objective of the course is to present basic economic and environment principles for clear understanding contemporary environmental and natural resource issues and policy.

Main subjects areas of environment economics course are:

Economic growth costs.

Economic growth and environment, environment as main source of economic growth. Environment as natural resource provider and environment as place for wastes. Overexploitation of these environment functions is the main source of environment degradation.

Environment Economics Content

Second subject is pollution and its control. Impact of economic activities and instruments of its mitigation. Very important is externalities concept and methods of internalization of externalities. That is methods how to make polluters include external costs (at least some part of them) in costs of polluter. Economic instruments are environment taxes, charge based on Pigouvian tax concept.

Students analyze how environment taxes work and compare standards and taxes taking into account decrease in environment damage and abatement costs.

Environment Economics Content

Third subject area is environment valuing. Central problem of environment economics is evaluation of environment damage in money terms and economic value of environment. There are a lot of evaluation methods such as market price method, contingent valuation methods, willingness to pay travel- costs method, hedonic price methods and so on. Students can evaluate results of some case studies.

Environment Economics Content

Natural resource nonrenewable and renewable is next important subject area of the course. Resource evaluation, resource production conditions, resource prices (Hotelling rule). Natural resource scarcity is in the centre of the topic.

Students calculate resource extraction projects traditional financial criteria (NPV, IRR) and apply knowledge about environment economic value that is economic evaluation of environment impact of resource extraction.

Environment Economics Content

Besides there are some special topics such as:

-Environment management systems and GRI global reporting system.

-Climate change.

Central topics are costs of climate change, adaptation costs. GHG emissions control methods, European Unions Emission Trading system.

Problems

The problem in studying main topics is that knowledge in natural sciences that concerns environment would be valuable, but students (not all students) have poor knowledge about environment sciences.

Environment Economics course structure.

1. Economic growth and environment. Sustainable development.
2. Economic activities and environment degradation. Environmental problems. Externalities.
3. Instruments of envionment impact control.
4. Comparative analysis of environment policy instruments.
5. Nonrenewable resources, stock evaluation. Hotelling rule.
6. Renewable resources. Rules of its harvesting.
7. Material flows in economy and it assessment in EU member states.
8. Sustainable development indicators. DPSIR system of indicators.
9. Total economic value of environment. Valuation methods.
10. Environment management systems.
11. Climate change, adaptation, costs.
12. GHG emissions control. EU emission trading system.

Course structure and content is traditional and is based on textbooks such as:
Economics and Environment, Eban S. Goodstein, John Wiley and Sons, 2005.